

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A network comprising:

several network clusters each having ~~[[of]]~~ at least one wireless network node ~~each~~ and at least one fixed network node, each of said at least one fixed network node being coupled to a respective wireless network node of said at least one wireless network node via a respective wire interface, each of said at least one wireless network node including a transmitter for the wireless transmission of packets in time slots of given length in a time multiplex process, the variable length of said packets having at least a value which is smaller than the length of a fixedly given time slot,

wherein a transmitting wireless network node of said wireless network nodes is configured for combining several packets into a superpacket and for transmitting the superpacket to all wireless network nodes authorized for the data transmission via a point-to-multipoint link, and

wherein a receiving wireless network node of said wireless network nodes after reception of the superpacket is designed to derive a packet from the superpacket if the destination of the packet of said transmitted packets lies in ~~the relevant associated~~ a network cluster corresponding to said receiving wireless network node;

said transmitting wireless network node being configured for segmenting the superpacket into cells when the length of the superpacket exceeds the length of the fixedly given time slots, and for inserting the cells into several time slots, and

said receiving wireless network node which receives the cells being configured for forming the superpacket from the cells.

Claim 2. (Canceled)

3. (Previously Presented) A network as claimed in claim 1, wherein said transmitting wireless network node is designed for inserting the cells into several time slots of a frame or into one or several time slots of several frames.

4. (Previously Presented) A network as claimed in claim 1, wherein one of the wireless network nodes from among the wireless network nodes which form a wireless network is constructed so as to form a central node which is designed to control the radio traffic.

5. (Previously Presented) A network as claimed in claim 1, wherein said receiving wireless network node which receives a packet is designed for comparing the address identification in the control field of the packet with an address which belongs to the associated network cluster and which identifies the destination.

6. (Previously Presented) A network as claimed in claim 5, wherein said receiving wireless network node contains a table for the storage of all addresses of the associated network cluster.

7. (Previously Presented) A network as claimed in claim 1, further comprising a management system which controls at least one of said wireless network nodes such that said at least one wireless

network node provides the establishment of point-to-point connections only instead of point-to-multipoint connections.

8. (Previously Presented) A network as claimed in claim 7, wherein said transmitting wireless network node is designed for sending a key via a point-to-multipoint connection and for sending coded data via a point-to-point connection.

9. (Currently amended) A wireless network node in a network cluster of a network, said wireless network node including a transmitter designed for the wireless transmission of packets in time slots of given length in a time multiplex process, the variable length of said packets having at least a value which is smaller than the length of a fixedly given time slot,

wherein the wireless network node is designed for combining several packets into a superpacket and for transmitting said superpacket via a point-to-multipoint connection to all wireless network nodes authorized for the data transmission; and

said wireless network node being further configured for segmenting said superpacket into cells when the length of the superpacket exceeds the length of the fixedly given time slot, and for inserting the cells into several time slots so that a receiving wireless network node which receives the cells forms said superpacket from the cells;

said wireless network node further including means for coupling to at least one fixed network node via a respective wire interface.

10. (Currently amended) A wireless network node in a network cluster of a network, said wireless network node including a receiver designed for the wireless reception of packets in time slots of given length in a time multiplex process, the variable length of said packets having at least a value which is smaller than the length of a fixedly given time slot,

wherein the wireless network node is designed so as to derive a packet from a superpacket after reception of said superpacket if the designation of one of said packets of said received packets lies within ~~relevant associated~~ the network cluster;

said wireless network node being further configured to form said superpacket from cells received from a transmitting node which segments said superpacket into said cells when the length of the superpacket exceeds the length of the fixedly given time slot and inserts said cells into several time slots;

said wireless network node further including means for coupling to at least one fixed network node via a respective wire interface.

11. (Previously Presented) A network as claimed in claim 5, wherein said receiving wireless network node derives a relevant packet of said packets from said superpacket, said relevant packet having said address designation belonging to the associated network cluster.

12. (Currently Amended) A network comprising:

a plurality of network clusters each including a wireless network node and at least one fixed network node, each of said at least one fixed network node being coupled to a respective wireless network node of said plurality of network clusters via a respective wire interface,

wherein a transmitting wireless network node of said wireless network nodes is configured to combine several packets into a superpacket and transmit the superpacket to receiving wireless network nodes of said wireless network nodes; and

wherein a receiving wireless network node of said wireless network nodes after reception of a superpacket is configured to derive a packet from the superpacket if a destination of the packet of said transmitted packets lies in ~~the relevant associated~~ a network cluster of said plurality of network clusters corresponding to said receiving wireless network node;

said transmitting wireless network node being configured to segment the superpacket into cells when a length of the superpacket exceeds a length of a fixedly given time slots, and to insert the cells into several time slots; and

said receiving wireless network nodes which receive said cells being configured to form said superpacket from said cells.

13. (Previously Presented) A network as claimed in claim 12, wherein said transmitting wireless network node is designed for inserting the cells into several time slots of a frame or into one or several time slots of several frames.

14. (Previously Presented) A network as claimed in claim 12, wherein one of the wireless network nodes is configured to act as a central node which is designed to control radio traffic.

15. (Previously Presented) A network as claimed in claim 12, wherein said receiving wireless network node which receives a packet is configured to compare an address identification in a control field of the packet with an address which belongs to an associated network cluster.

16. (Previously Presented) A network as claimed in claim 15, wherein said receiving wireless network node contains a table for storage of all addresses of the associated network cluster.

17. (Previously Presented) A network as claimed in claim 12, wherein the network comprises a management system which controls at least one of said wireless network nodes such that said at least one wireless network node provides establishment of point-to-point connections or point-to-multipoint connections.

18. (Previously Presented) A network as claimed in claim 17, wherein said at least one transmitting wireless network node is configured to send a key via a point-to-multipoint connection and to send coded data via a point-to-point connection.

19. (Previously Presented) A network as claimed in claim 1, wherein said transmitting wireless network node is designed for inserting the cells into several time slots of several frames.

20. (Previously Presented) A network as claimed in claim 10, wherein said wireless network node is designed for inserting the cells into several time slots of several frames.

21. (Previously Presented) A network as claimed in claim 12, wherein said transmitting wireless network node is designed for inserting the cells into several time slots of several frames.